UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,224	08/19/2005	Hans-Konrad Mueller-Hermelink	50308/006001	2578

27500 7590 03/27/2007

PILLSBURY WINTHROP SHAW PITTMAN LLP
ATTENTION: DOCKETING DEPARTMENT
P.O BOX 10500
McLean, VA 22102

EXAMINER	
REDDIG, PETER J	
ART UNIT	PAPER NUMBER
1642	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	03/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,224	MUELLER-HERMELINK ET AL.	
	Examiner	Art Unit	
	Peter J. Reddig	1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,5,7,10-14,19,22-25,41-43,48 and 111-113* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *2,5,7,10-14,19,22-25,41-43,48 and 111-113* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Claim 2 links inventions 1-11. The restriction requirement among the linked inventions is subject to the nonallowance of the linking claim(s), claim 2. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP 804.01.

Group 1, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is a stomach adenocarcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 2, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces

apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is a colorectal adenocarcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 3, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is a squamous cell lung carcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 4, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is a lung adenocarcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 5, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is a squamous cell carcinoma of the esophagus, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 6, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is an adenocarcinoma of the pancreas, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 7, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is an adenocarcinoma of the prostate, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 8, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is a ductal carcinoma of the breast, and wherein said polypeptide induces apoptosis of said neoplastic

cell

Group 9, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is a lobular carcinoma of the breast, and wherein said polypeptide induces apoptosis of said neoplastic cell

Group 10, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is an adenocarcinoma of the ovary, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 11, claim(s) 5, 11-14, 19, 22-25, 41-43, and 48, drawn to a purified polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cells, and wherein said neoplastic cell is an adenocarcinoma of the uterus cell, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Claim 7 links inventions 12-21. The restriction requirement among the linked inventions is subject to the nonallowance of the linking claim(s), claim 7. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP 804.01.

Group 12, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic.cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is a stomach adenocarcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 13, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is a colorectal adenocarcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 14, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is a squamous cell lung carcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 15, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is a lung adenocarcinoma, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 16, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is a squamous cell carcinoma of the esophagus, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 17, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is an adenocarcinoma of the pancreas, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 18, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is an adenocarcinoma of the prostate, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 19, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is a ductal carcinoma of the breast, and wherein said polypeptide induces apoptosis of said neoplastic cell

Group 20, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is a lobular carcinoma of the breast, and wherein said polypeptide induces apoptosis of said neoplastic cell

Group 21, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is an adenocarcinoma of the ovary, and wherein said polypeptide induces apoptosis of said neoplastic cell.

Group 22, claim(s) 10 and 48, drawn to a purified polypeptide that inhibits cell proliferation when bound to a neoplastic cell, but does not inhibit cell proliferation of a non-neoplastic cell, wherein said polypeptide specifically binds to ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and not to non-neoplastic cell, and wherein said neoplastic cell is an adenocarcinoma of the uterus cell, and wherein said polypeptide induces apoptosis of said neoplastic cell

Group 23, claim(s) 111-113 and 48, drawn to a purified antibody or functional fragment thereof, wherein said antibody or said functional fragment specifically binds a polypeptide having an approximate molecular weight of 35 or 65 kDa using sodium dodecyl sulfate polyacrylamide gel electrophoresis, and wherein said polypeptide is a polypeptide expressed by ASPC-1 (ATCC Accession No. CRL-1682) and BXPC-3 (ATCC Accession No. CRL-1687) cells and said polypeptide is not expressed by non-neoplastic cells of the same tissue type.

The inventions listed as Groups 1-23 do not relate to a single general inventive concept under PCT Rule 13.1 because unity of invention between different categories of inventions will only be found to exist if specific combinations of inventions are present. Those combinations include:

A) A product and a special process of manufacture of said product.

B) A product and a process of use of said product.

C) A product, a special process of manufacture of said product, and a process of use of said product.

D) A process and an apparatus specially designed to carry out said process.

E) A product, a special process of manufacture of said product, and an apparatus specially designed to carry out said process.

The inventions of groups 1-23 are drawn to multiple products. Allowed combinations do not include multiple products, as claimed in the instant application. Hence, only one product and one process of use of said product relate to a single general inventive concept. Since multiple products with different special technical features are claimed, the first invention of the category first mentioned in the claims of the application will be considered as the main invention in the claims, see PCT article 17(3) (a) and 1.476 (c), 37 C.F.R. 1.475(d).

Accordingly, Groups 1-23 are not so linked as to form a single general inventive concept and the finding of lack of unity is proper.

Species Elections for Group 1-11

A. Claim 2 is generic to the following disclosed patentably distinct species of purified polypeptides:

1) a polypeptide NOT comprising an antibody or functional fragment thereof

2) a polypeptide comprising an antibody or a functional fragment thereof

If applicant elects species A2, then applicant must elect from species group B.

B. Claim 2 and 11 are generic to the following disclosed patentably distinct species of an antibody or a functional fragment thereof, which comprises:

1) a polypeptide comprising a fragment that is NOT at least 98% identical or substantially identical to SEQ ID NO: 1 or SEQ ID NO:3

2) a polypeptide comprising a fragment that is at least 98% identical or substantially identical to SEQ ID NO: 1

3) a polypeptide comprising a fragment that is at least 98% identical or substantially identical to SEQ ID NO:3

4) a polypeptide comprising amino acids 26-31, 49-51, and 88-95 of SEQ ID NO:1

5) a polypeptide comprising amino acids amino acids 11-18, 36-43, and 82-90 of SEQ ID NO:3.

Claims will be examined as drawn to the elected species 2, 5, 11-14, 19, 22-25, 41-43, and 48

Species Elections for Group 12-22

A. Claim 7 is generic to the following disclosed patentably distinct species of purified polypeptides:

1) a polypeptide NOT comprising an antibody or functional fragment thereof

2) a polypeptide comprising an antibody or a functional fragment thereof

If applicant elects species A2, then applicant must elect from species group B.

B. Claim 7 is generic to the following disclosed patentably distinct species of an antibody or a functional fragment thereof, which comprises:

1) a polypeptide comprising a fragment that is NOT at least 98% identical to SEQ ID NO:1 or SEQ ID NO:3

2) a polypeptide comprising a fragment that is at least 98% identical to SEQ ID NO: 1

3) a polypeptide comprising a fragment that is at least 98% to SEQ ID NO: 3

Claims 7, 10 and 48 will be examined as drawn to the elected species.

Species Elections for Group 23

A. Claim 111 is generic to the following disclosed patentably distinct species of purified antibody or a functional fragment thereof, which comprises:

1) a sequence that is NOT substantially identical to SEQ ID NO:1 or SEQ ID NO:3

2) a sequence that is substantially identical to SEQ ID NO: 1

3) a sequence that is substantially identical to SEQ ID NO:3

Claims 111-113 and 48 will be examined as drawn to the elected species.

In accordance with the decisions in *In re Harnisch*, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and *Ex parte Hozumi*, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984), restriction of a Markush group is proper where the compounds within the group either (1) do not share a common utility, or (2) do not share a substantial structural feature disclosed as being essential to that utility. In addition, a Markush group may encompass a plurality of independent and distinct inventions where two or more members are so unrelated and diverse that a prior art reference anticipating the claim with respect to one of the members would not render the other member(s) obvious under 35 USC 103. Since the decisions in *In re Weber*, 198 USPQ 328 (CCPA 1978) and *In re Hass*, 198 USPQ 334 (CCPA 1978), it is proper for the Office to refuse to examine that which applicants regard as their invention, if the subject matter in a claim lacks unity of invention, see MPEP 803.02.

The above species are independent or distinct because they comprise structurally distinct molecules and have different modes of operation and different effects. Further, each species would require different searches and the consideration of different patentability issues.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species from each species group above for the elected invention Group, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103 of the other invention.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this restriction requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Reddig whose telephone number is (571) 272-9031. The examiner can normally be reached on M-F 8:30 a.m.-5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley can be reached on (571) 272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter J. Reddig, Ph.D.
Examiner
Art Unit 1642

SUSAN UNGAR, PH.D
PRIMARY EXAMINER

PJR